

Claims

1. A device for fastening at least one dressing (03a) on a cylinder (01a) of a rotary printing press, wherein the cylinder (01a) has at least one groove (06a) with an opening (07) oriented toward the surface (02) of the cylinder (01a) with a first wall (08) and a second wall (09), wherein at least one spring element (17) and one holding means (16) for holding at least one leg (05), inserted into the opening (07), of a trailing end (12) of the dressing (03a) are provided in the groove (06a), wherein the spring element (17) exerts the force necessary for holding on the holding means (16), wherein the holding means (16) is embodied as a pivotable lever, characterized in that the holding means (16) is seated opposite the opening (07) in a bearing point (24) and that the spring element (17) is indirectly or directly supported on a wall (08, 09) of the opening (07) in a support point (23), while at the same time the holding means (16) maintains the leg (05) in a clamping point (25) at the wall (08, 09) of the opening (07) located opposite the support point (23), wherein the spring element (17) fixes the holding means (16) in place on its bearing point (24) by means of a counterforce generated in its support point (23).

2. The device in accordance with claim 1, characterized in that one of the walls (08, 09) forms an acute angle (α) with a tangent line (T) resting on the opening (07) in the surface (02) of the cylinder (01a), wherein the wall (08, 09) having the support point (23) of the spring element (17) forms an inclined

surface because of the angle (α), which faces the bearing point (24) of the holding means (16).

3. The device in accordance with claim 1, characterized in that the spring means (17) is supported on the wall (08) of the opening (07) which is first in the production direction (P) of the cylinder (01a).

4. The device in accordance with claim 1, characterized in that the first wall (08) extends from an edge (13) of the opening (07), which is in front in the production direction (P) of the cylinder (01a), to the groove (06a), wherein the support point (23) of the spring element (17) is at a distance (a) following an end of a leg (04) of a leading end (11) of the dressing (03a) suspended at the front edge (13) of the opening (07).

5. The device in accordance with claim 4, characterized in that the distance (a) is less than 5 mm.

6. The device in accordance with claim 1, characterized in that the first wall (08) extends from a front edge (13) of the opening (07) which, in the production direction (P) of the cylinder (01a) is in front, toward the groove (06a), wherein the support point (23) of the spring element (17) is located on a leg (04) of the leading end (11) of the dressing (03a) suspended at the front edge (13) of the opening (07).

7. The device in accordance with claim 1, characterized in that at least the leg (05) of the trailing end (12) is embodied as a first rocker wherein, following the insertion of the leg (05)

into the opening (07) of the groove (06a), this rocker is supported with its bearing point (22) on the second wall (09) of the opening (07), or on a wall (10) of the groove (06a).

8. The device in accordance with claim 7, characterized in that the holding means (16) braces the dressing (03a) by means of the leg (05) embodied as a rocker.

9. A device for fastening at least one dressing (03b) on a cylinder (01b) of a rotary printing press, wherein the cylinder (01b) has at least one groove (06b) with an opening (07) oriented toward the surface (02) of the cylinder (01b) with a first wall (08) and a second wall (09), wherein at least one spring element (37) and one clamping element (36) for clamping at least one leg (35), inserted into the opening (07), of a trailing end (33) of the dressing (03b) are provided in the groove (06b), wherein the clamping element (36) is embodied as a pivotable lever with a first end (38) and a second end (39), wherein the clamping element (36) is seated with its second end (39) in a bearing point (40) opposite the opening (07), characterized in that the spring element (37) is supported on a support point (43) in such a way that the spring element (37) exerts such a force on the clamping element (36), that the first end (38) of the clamping element indirectly or directly clamps at least the leg (35) resting against the first wall (08) of the opening (07) in a clamping point (45) and at the same time fixes the second end (39) of the clamping element (36) in place at its bearing point (40) by means of a counterforce generated at the clamping point (45).

10. The device in accordance with claim 9, characterized in that the first wall (08) extends from a front edge (13) of the opening (07) which is first in the production direction (P) of the cylinder (01b) toward the groove (06b), wherein the first wall (08) forms an acute angle (α) with a tangent line (T) resting on the opening (07) in the surface (02) of the cylinder (01b), so that the clamping point (45) is located on the first wall (08) extending at the angle (α).

11. The device in accordance with claim 2 or 10, characterized in that the angle (α) lies between 40° and 50° .

12. The device in accordance with claim 1 or 9, characterized in that the bearing points (24, 40) of the holding means (16) or of the clamping element (36) are located in or at the bottom of the groove (06a, 06b).

13. The device in accordance with claim 1 or 9, characterized in that the spring element (17, 37) is embodied as a leaf spring (17, 37).

14. The device in accordance with claim 1 or 9, characterized in that the spring element (17, 37) is pre-stressed.

15. The device in accordance with claim 4 or 10, characterized in that a leg (04, 34) of a leading end (11, 32) of the dressing (03a, 03b) can be suspended on the front edge (13) of the opening (07).

16. The device in accordance with claim 1 or 9, characterized in that an actuating means (20) is provided in the groove (06a, 06b) which, when actuated, acts counter to the spring element (17, 37) and in this way releases the fastening of the leg (05, 35).

17. The device in accordance with claim 16, characterized in that the actuating means (20) is a hose (20) which can be charged with a pressure medium.

18. The device in accordance with claim 1 or 9, characterized in that in each section, which is vertical in respect to the axial direction, the groove (06a, 06b) has only one holding means (16) or one clamping element (36).

19. The device in accordance with claim 1 or 9, characterized in that several holding means (16) or clamping elements (36) with associated spring elements (17, 37) are arranged in the axial direction of the groove 06a, 06b).

20. The device in accordance with claim 1 or 9, characterized in that the bearing point (24, 40) of the holding means (16), or of the second end (39) of the clamping element (36) is provided fixed in place in the groove (06a, 06b).

21. The device in accordance with claim 1 or 9, characterized in that at least one base body (41) with a holding means (16), or a clamping element (36) and a spring element (17, 37), is provided in the groove (06a, 06b), wherein the holding

means (16) or the clamping element (36) are pivotably seated in the base body (41).

22. The device in accordance with claim 21, characterized in that the base body (41) is supported, fixed against relative rotation, on the wall (10) of the groove (06b).

23. The device in accordance with claim 9, characterized in that the groove (06b) has a circular cross section.

24. The device in accordance with claim 21, characterized in that the base body (41) is supported, fixed against relative rotation, on a wall (08, 09) of the opening (07) by means of a stop (42), which is formed on the base body (41) and projects into the opening (07).

25. The device in accordance with claim 24, characterized in that the stop (42) is supported on the wall (08, 09) of the opening (07) opposite the clamping point (45).

26. A printing group of a rotary printing press, having at least one forme cylinder (01a) and one transfer cylinder (01b), wherein the forme cylinder (01a) supports at least one plate-shaped printing forme (03a), and at least one support plate (31) with a printing blanket (30) is arranged on the transfer cylinder (01b), wherein, viewed in the production direction (P) of the cylinders (01a, 01b), the printing forme (03a) and the support plate (31) each have a leading end (11, 32) with beveled legs (04, 34) and a trailing end (12, 33) with beveled legs (05, 35), wherein both cylinders (01a, 01b) each have at least one groove

(06a, 06b) with an opening (07), which is directed to their surface (02) and has, viewed in the production direction (P) of the cylinders (01a, 01b), a front edge (13) and a first wall (08), as well as a rear edge (14) and a second wall (09), wherein an acute angle (α) is formed respectively between the wall (08) extending from the front edge (13) toward the groove (06a, 06b) and a tangent line (T) resting on the opening (07) on the surface (02) of the cylinders (01a, 01b), and the respective leg (04, 34) of the leading end (11, 32) of the printing forme (03a) or of the support plate (31) can be suspended from this front edge (13), characterized in that at least one spring element (17) and a holding means (16) for holding the leg (05) of the trailing end (12) of the printing forme (03a) introduced into the opening (07) is provided in the groove (06a), wherein the holding means (16) is embodied as a pivotable lever and is seated opposite the opening (07) in a bearing point (24), and the spring element (17) is supported in a support point (23) on a wall (08, 09) of the opening (07), while the holding means (16) maintains the leg (05) in a clamping point (25) on the wall (08, 09) of the opening (07) opposite the support point (23) at the same time, wherein the spring element (17) fixes the holding means (16) in place in its bearing point (24) by means of a counterforce generated in its support point (23), that in the groove (06b) at least one spring element (37) and a clamping element (36) for clamping of at least one leg (35), introduced into the opening (07), of a trailing end (33), viewed in the production direction (P) of the cylinder (01b), of the dressing (03b) are provided, wherein the clamping element (36) is embodied as a pivotable lever with a first end (38) and a second end (39), wherein the clamping element (36) is seated by its second end (39) in a bearing point (04) opposite the

opening (07), wherein the spring element (37) is supported on a support point (43) in such a way that the spring element (37) exerts a force on the clamping element (36), so that the first end (38) of the clamping element (36) clamps at least the leg (35) placed against the first wall (08) of the opening (07) in a clamping point (45) and, at the same time, fixes the second end (39) of the clamping element (36) in its bearing point (40) by means of a counterforce generated at the clamping point (45).

27. The printing group in accordance with claim 26, characterized in that an approximately right angle (β) is formed between the wall (09) extending from the rear edge (14) to the groove (06a) of the forme cylinder (06a) and the tangent line (T) resting on the opening (07) in the surface (02) of the forme cylinder (01a), wherein the trailing end (12) of the printing forme (03a) is maintained on the wall (09) extending from the rear edge (14) toward the groove (06a).

28. The printing group in accordance with claim 26, characterized in that the leg (35) at the trailing end (33) of the support plate (31) is beveled at an obtuse angle (γ) in respect to the tangent line (T) resting on the opening (07), and is maintained, together with the leg (34) at the leading end (32) of the support plate (31), on the wall (08) extending from the front edge (13) to the groove (06b).

29. The printing group in accordance with claim 26, characterized in that at least one base body (41) with a clamping element (36) and a spring element (37) is provided in the groove

(06b) of the transfer cylinder (01b), wherein the clamping element (36) is pivotably seated in the base body (41).

30. A printing group of a rotary printing press, having at least one forme cylinder (01a) and one transfer cylinder (01b), wherein the forme cylinder (01a) supports at least one plate-shaped printing forme (03a), and at least one support plate (31) with a printing blanket (30) is arranged on the transfer cylinder (01b), wherein, viewed in the production direction (P) of the cylinders (01a, 01b), the printing forme (03a) and the support plate (31) each have a leading end (11, 32) with beveled legs (04, 34) and a trailing end (12, 33) with beveled legs (05, 35), wherein both cylinders (01a, 01b) each have at least one groove (06a, 06b) with an opening (07), which is directed to their surface (02) and has, viewed in the production direction (P) of the cylinders (01a, 01b), a front edge (13) and a first wall (08), as well as a rear edge (14) and a second wall (09), wherein an acute angle (α) is formed respectively between the wall (08) extending from the front edge (13) toward the groove (06a, 06b) and a tangent line (T) resting on the opening (07) on the surface (02) of the cylinders (01a, 01b), and the respective leg (04, 34) of the leading end (11, 32) of the printing forme (03a) or of the support plate (31) can be suspended from this front edge (13), characterized in that an approximately right angle (β) is formed between the wall (09) extending from the rear edge (14) to the groove (06a) of the forme cylinder (06a) and the tangent line (T) resting on the opening (07) in the surface (02) of the forme cylinder (01a), wherein the trailing end (12) of the printing forme (03a) is maintained on the wall (09) extending from the rear edge (14) toward the groove (06a), and that the leg (35) at the

trailing end (33) of the support plate (31) is beveled at an obtuse angle (gamma) in respect to the tangent line (T) resting on the opening (07), and is maintained, together with the leg (34) at the leading end (32) of the support plate (31), on the wall (08) extending from the front edge (13) to the groove (06b).

31. The printing group in accordance with claim 30, characterized in that at least one spring element (17, 37) and at least one holding element (16, 36) are provided in the groove (06a, 06b) of the cylinders (01a, 01b), wherein the spring element (17, 37) is respectively arranged in the groove (06a, 06b) in such a way that, when acting on the holding means (16, 36), it exerts the required force for holding at least one leg (05, 34, 35) introduced into the opening (07).

32. The printing group in accordance with claim 31, characterized in that the spring element (17, 37) simultaneously fixes the holding means (16, 36) in place on its bearing point (24, 40) in the groove (06a, 06b).

33. A device for fastening at least one dressing (03a, 03b) on a cylinder (01a, 01b) of a rotary printing press, wherein the cylinder (01a, 01b) has at least one circular groove (06a, 06b) with an opening (07), which is directed toward the surface (02) of the cylinder (01a, 01b) and has a first wall (08) and a second wall (09), wherein at least one base body (41) with at least one spring element (17, 37) and at least one holding means (16) or clamping element (36) is provided in the groove (06a, 06b), characterized in that the base body (041) is supported, fixed against relative rotation, on a wall (08, 09) of the opening

(07) by means of a stop (42) formed on the base body (41), which projects into the opening (07).

34. The device in accordance with claim 33, characterized in that the holding means (16) or the clamping element (36) are seated in a bearing point (24, 40) in the base body (41).

35. The device in accordance with claim 33, characterized in that the spring element (17, 37) or the holding means (16) or the clamping element (36) are indirectly or directly supported in a support point (23, 45) on the wall (08, 09), which is located in the opening (07) opposite the wall (08, 09) on which the stop (42) is supported.

36. The device in accordance with claim 33, characterized in that the spring element (17, 37) generates a counterforce at the support point (23, 45), which has a force component which fixes the holding means (16) or the clamping element (36) in place on the bearing point (24, 40).

37. The device in accordance with claim 26, 30 or 33, characterized in that the opening (07) in the cylinders (01a, 01b) has a slit width (S) of less than 5 mm.

38. The device in accordance with claim 26, 30 or 33, characterized in that several dressings (03a, 03b) are arranged in the circumferential direction of the cylinders (01a, 01b), so that the legs (04, 05, 34, 35) of dressings (03a, 03b), which are different from each other, are fastened in the opening (07).